Supreme Court, U.S.
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Nos. 82-524, 82-545 and 82-551

IN THE

Supreme Court of the United States

OCTOBER TERM, 1982

BALTIMORE GAS AND ELECTRIC CO., *et al.*,
Petitioners,

v.

NATURAL RESOURCES DEFENSE COUNCIL, INC.,
Respondent.

UNITED STATES NUCLEAR REGULATORY COMMISSION AND UNITED STATES OF AMERICA,
Petitioners,

v.

NATURAL RESOURCES DEFENSE COUNCIL, INC., *et al.*,
Respondents.

COMMONWEALTH EDISON COMPANY, *et al.*,
Petitioners,

v.

NATURAL RESOURCES DEFENSE COUNCIL, INC., *et al.*,
Respondents.

BRIEI *AMICUS CURIAE* OF SCIENTISTS AND ENGINEERS FOR SECURE ENERGY, INC.

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On Writ of Certiorari to the United States Court of Appeals For the District of Columbia Circuit

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BRIEF OF *AMICUS CURIAE*

This brief is submitted by Scientists and Engineers for Secure Energy, Inc. ("SE_2"), in support of the Petitioners. The parties have consented to the filing of this brief in letters which are on file with the Clerk of this Court.

INTEREST OF SE_2

SE_2 is a non-profit corporation organized in 1976 under the laws of the State of New York. Its members include over 1,000 faculty members and researchers from American colleges and universities, both state and private. SE_2's members include eight Nobel Laureates and comprise an interdisciplinary community of significant scientific accomplishment.

Representing the membership of SE_2 in this matter are Hans Albrecht Bethe, Frederick Seitz, Eugene P. Wigner and Edward Teller. Hans Bethe, currently a professor at Cornell University, was director of the Theoretical Physics Division of Los Alamos Science Laboratory from 1943 to 1946; the head of the Presidential Study of Disarmament, 1958; the recipient of a Nobel Prize in Physics in 1967; and is a leading contributor to the theory of nuclear reactors. Frederick Seitz, Chairman of SE_2, is a recipient of the National Medal of Science, our nation's highest science award. Dr. Seitz has served as president of the National Academy of Sciences and Chairman of the Board of Trustees of Sloan-Kettering Institute for Cancer Research. He currently is Chairman of the Guggenheim Foundation. Eugene P. Wigner received a Nobel Prize for Physics in 1963, the National Medal of Science, the Albert Einstein Award, and has served as President of the American Physical Society. Dr. Wigner has been affiliated for most of his professional career with Princeton University. Edward Teller presently is affiliated with the Hoover Institution, Stanford University. Dr. Teller has made important contributions in several fields including chemical physics, molecular physics, nuclear physics and quantum theory. He has authored

many books and received numerous awards during his distinguished career.

SE_2 and its members are dedicated to the prudent advancement of technology for the benefit of mankind. Its purpose is to correct the alarming degree of misunderstanding on fundamental scientific and technological issues permeating the national energy debate, especially with respect to the balancing of environmental concerns. Toward that end, SE_2 offers its views, based on the knowledge and expertise of its members, to the public and to the various governmental agencies with responsibility for the development of a proper legal framework for the resolution of energy issues. SE_2 has appeared as *amicus curiae* before this Court on several occasions in energy related cases including *Vermont Yankee II*. Through its Working Group on Waste Disposal, SE_2 is also a participant in the NRC's ongoing Rulemaking on the Storage and Disposal of Nuclear Waste.

As citizens, members of SE_2 are deeply concerned for the well-being and future hopes of our society. SE_2 and its members have an interest in assuring that consideration of major federal actions be conducted under NEPA in accord with scientific principles and the orderly rule of law. As scientists and engineers they are quite aware of the many problems related to the production of needed electric power and the importance of a safe and secure energy base for the continued security and prosperity of the country. In their professional roles, they are keenly sensitive to the limits of scientific knowledge and meaningful debate. They view the decision below as reaching beyond those limits and perverting scientific principles by sometimes engaging in irrational hyperbole in disregard of the proper role

of the judiciary and the previous explicit directions by this Court.

SUMMARY OF ARGUMENT

Congress, the NRC and scientists expect the development of adequate waste disposal technology (development which has occurred and is being implemented in countries like Sweden). The court of appeals, while citing no scientific reason not to expect this development in the United States, has interfered with the NRC's policy judgment. Even if one were to assume that Congress, the NRC and scientists may be wrong and that no such technology will be developed, the most adverse environmental consequences would involve such insignificant risks as a repository leak once every 2,500 years, risks less than that of dying on a given day from a volcanic eruption. *NRDC v. NRC*, 685 F.2d 459, 543-44 (D.C. Cir. 1982) (Wilkey, J., dissenting).

By mandating quantification of these consequences in the NRC's table and thus requiring discussion in individual licensing proceedings, the majority of the D.C. panel would trivialize the NRC's rulemaking and depart from the consistent approach of numerous other courts. The court would require the NRC and licensing agencies to spend time considering virtually all consequences, however insignificant. To satisfy the court, the NRC's proceedings would essentially never end. The court of appeals has seized unlimited authority to control the NRC, contrary to this Court's holding in *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council*, 435 U.S. 519, 555 (1978) [hereinafter cited as *Vermont Yankee II*].

ARGUMENT

The majority below held that the NRC, in preparing a table which would serve merely as a starting point for the development of individual environmental impact statements, could neither (1) consider environmental consequences alone and then exclude them from cost-benefit balancing, nor (2) treat as zero those environmental costs represented by uncertainties unless their cost is, in fact, zero. Even though the table would not foreclose discussion of other aspects of the fuel cycle not addressed by it, the decision below would require that the table expressly quantify unlikely consequences and unascertainable risks which other courts have allowed subsequent environmental impact statements to exclude or to only estimate.

In *Vermont Yankee II*, 435 U.S. at 553, this Court applied a "threshold test" to NEPA's requirement that environmental impact statements consider alternatives to the proposed action. Under this test, the statements need consider only significant alternatives.

Numerous lower courts similarly have construed NEPA's requirement that environmental impact statements consider adverse environmental effects. These courts have allowed statements to exclude unlikely consequences and to estimate unascertainable risks, regardless of the closeness of the cost-benefit balance. *See Adler v. Lewis*, 675 F.2d 1085, 1098 (9th Cir. 1982); *Warm Springs Dam Task Force v. Gribble*, 621 F.2d 1017, 1026 (9th Cir. 1980); *Environmental Defense Fund v. Hoffman*, 566 F.2d 1060, 1067 (8th Cir. 1977); *Swain v. Brinegar*, 542 F.2d 364, 368 (7th Cir. 1976); *Carolina Environmental Study Group v. United States*, 510 F.2d 796, 799 (D.C. Cir. 1975);

Trout Unlimited v. Morton, 509 F.2d 1276, 1283 (9th Cir. 1974); *Environmental Defense Fund v. Corps of Engineers*, 492 F.2d 1123, 1137 (5th Cir. 1974) (exclusion of unlikely consequences). *See also Environmental Defense Fund v. Andrus*, 619 F.2d 1368, 1374 (10th Cir. 1980); *Sierra Club v. Morton*, 510 F.2d 813, 822 (5th Cir. 1975); *Jicarilla Apache Tribe v. Morton*, 471 F.2d 1275, 1280 (9th Cir. 1973); *Natural Resources Defense Council v. Morton*, 458 F.2d 827, 837 (D.C. Cir. 1972) (estimate of unascertainable risks).

This, of course, conforms to the behavior of reasonable individuals in ordinary situations, 685 F.2d at 544 (Wilkey, J., dissenting), and complies with the language of NEPA which requires that the statement discuss adverse environmental effects which *cannot* be avoided.

Respondent's brief in opposition to the petitions for certiorari (Res. Br. at 17) contends that while

> [p]etitioners appear to be arguing that potentially substantial environmental threats are not proper factors to be considered in the environmental analysis mandated by NEPA, if the agency believes their probability is low . . . established precedent indicates that uncertainty about the costs associated with a proposed action is no reason to exclude such costs from consideration in the actual decisionmaking process.

The cases Respondent cites to support this proposition, *id.* at 17 n.23, actually support Petitioners' position. In *Silva v. Lynn*, 482 F.2d 1282, 1284 (1st Cir. 1973), the First Circuit required an environmental impact statement to be "detailed" but did not address the exclusion of unlikely consequences. In *Citizens Against Toxic Sprays, Inc. v. Bergland*, 428 F. Supp.

908, 922 (D. Or. 1977), the district court, relying on *Trout Unlimited v. Morton*, 509 F.2d at 1283, required only a "reasonably thorough discussion of the significant aspects of the probable environmental consequences."

In *Sierra Club v. Stamm*, 507 F.2d 788, 793 (10th Cir. 1974), the Tenth Circuit allowed exclusion of "remote and speculative" alternatives. Respondent cites the reference in *Stamm* to the NEPA requirement that "presently unquantified environmental amenities and values . . . be given appropriate consideration in decisionmaking," but neglects the holding in *Stamm* that "[t]his in our view does not require the fixing of a dollar figure to either environmental losses or benefits." In *Cummington Preservation Committee v. FAA*, 524 F.2d 241, 244 (1st Cir. 1975), the First Circuit held that "[a]n EIS need not discuss every conceivable alternative plan of action, but only those which are reasonable."

In *Alaska v. Andrus*, 580 F.2d 465, 473 (D.C. Cir.), *vacated sub nom. Western Oil & Gas Association v. Alaska*, 439 U.S. 922 (1978), the District of Columbia Circuit, relying on *Jicarilla Apache Tribe v. Morton*, 471 F.2d at 1280, allowed a statement to estimate unascertainable risks: "If we were to impose a requirement that an impact statement can never be prepared until *all* relevant environmental effects were known, it is doubtful that any project could ever be initiated." Respondent cites the statement in *Andrus* that "[o]ne of the costs that must be weighed by decisionmakers is the cost of uncertainty," but neglects the next sentence in *Andrus*: "Where that cost *has* been considered . . . the courts may not substitute their judgment for that of the decisionmaker and insist that the pro-

ject be delayed while more information is sought." 580 F.2d at 473-74.

Stricter standards should not apply to NRC rulemaking than to the environmental impact statement itself. In the present case, the NRC acted properly in excluding unlikely consequences from the table and by estimating for limited purposes the insignificant or unascertainable risk to be zero. The NRC based its conclusion on a reasonable analysis, and the courts should not substitute their judgment. *Vermont Yankee II*, 435 U.S. at 555.

Excluding the storage technology issue from NRC's table by no means excludes it from public consideration, in environmental impact statements or elsewhere. The NRC has considered the matter on other occasions, as have the Energy Research and Development Administration, a Presidential task force, Congress, states and localities. 685 F.2d at 525 n.60 (Wilkey, J., dissenting). Respondent argues that Congress intends that statements include a worst case analysis. Res. Br. at 18. Congress, however, clearly intends that uncertainty regarding the technology should not delay nuclear reactor licensing. *Illinois v. NRC*, 591 F.2d 12, 16 (7th Cir. 1979); *Natural Resources Defense Council v. NRC*, 582 F.2d 166, 171 (2d Cir. 1978). *See also Environmental Defense Fund v. Corps of Engineers*, 492 F.2d at 1137 (congressional consideration eliminates need for NEPA analysis).

As the majority below notes, all environmental costs involve uncertainty. 685 F.2d at 478 n.100. Parties challenging the application of NEPA, therefore, must demonstrate the inadequacy of the agency's application by a preponderance of the evidence, rather than by a prima facie showing of deficiencies. *Isle of Hope Historical Association v. Corps of Engineers*, 646 F.2d

215, 220 (5th Cir. 1981); *Sierra Club v. Froehlke*, 534 F.2d 1289, 1300 (8th Cir. 1976). *See also Vermont Yankee II*, 435 U.S. at 553. Otherwise, parties could challenge the agency action continually and the NRC's proceedings would never end.

Agencies must consider all responsible scientific opinions, *Committee for Nuclear Responsibility v. Seaborg*, 463 F.2d 783, 787 (D.C. Cir. 1971), but in the present case the court of appeals has cited no scientific reason not to expect development of adequate technology. The most pessimistic, conservative conclusion possible is that "the evidence, although 'tentative' and general in nature, 'favors the view that suitable sites can be found.' " 685 F.2d at 481. Under these circumstances, allowing the court of appeals to reject the NRC's conclusions would give that court virtually unlimited authority to control the NRC.

CONCLUSION

The majority of a D.C. Circuit panel again has overstepped judicial boundaries by intruding on the province of Congress to establish policy and of the NRC to effectuate that policy in the nuclear energy field. Congress and the NRC continue in the assumption—supported by dozens of hearings over the years and by reality in foreign countries—that a long-range solution to permanent waste disposal in the United States will be found. The issue has been recognized, studied, discussed, and disclosed by those responsible for policy decisions.

The majority below impermissibly intrudes on the NRC's decision to treat as zero (for limited purposes) factors on the magnitude of 0.0004. Scientists often deal with "infinitely small" numbers approaching zero

or infinitely large numbers approaching infinity. To make decisions based on such numbers obviously requires a realistic appraisal of the meaningfulness of the numbers, not slavish dedication. SE_2 believes the NRC dealt realistically with infinitely small numbers by treating them for practical, limited purposes, as zero.

This Court has labeled "Kafkaesque" similar past efforts by the D.C. Circuit to intrude on the province of Congress and the NRC. SE_2 respectfully urges the Court to reverse the D.C. Circuit's latest Kafka tome.

Respectfully submitted,

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